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Inventor: BENYAHIA NASLI-BAKIR ET AL Serial No.: 09/741,095 Filing Date: 12/21/2000

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In the Claims:

Please amend the claims as follows:

1. (Currently Amended) A method of manufacturing <u>laminated</u>
<u>beams</u> composite products, wherein a plurality of <u>lamellas</u>
<u>elements</u> are assembled by gluing them together under pressure,
comprising the steps of:

providing a number of <u>lamellas</u> elements to be assembled;

applying an amount of glue to at least one surface of each said lamella element;

assembling the <u>lamellas</u> elements; and

subjecting the assembled <u>lamellas</u> elements to pressure in a press;

wherein a waiting lamella stacking time is defined by a lag between said glue application and pressure application steps; and

wherein said glue application step includes controlling an amount of at least one component of said glue applied to a said lamella element at a specific point thereon as a function of said waiting lamella stacking time.

2. (Currently Amended) The method according to claim 1, wherein the glue comprises an adhesive having multiple components, one said adhesive component comprising a hardener and wherein the amount of one of said adhesive components is controlled so as to control a ratio of said hardener to said

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other adhesive components as a function of said waiting lamella stacking time.

- 3. (Currently Amended) The method according to claim 2, wherein the glue is a two-component adhesive comprising hardener and a glue, the ratio of hardener to glue is controlled to be lower for longer <u>lamella stacking</u> waiting times.
- 4. (Currently Amended) The method according to claim 1, wherein the glue is a one-component glue, and the amount of said glue applied to each said <u>lamella element</u> is increased as a function of increased <u>lamella stacking waiting</u> time for each said <u>lamella element</u>.
- 5. (Currently Amended) The method according to claim 4 wherein the amount of glue applied to each <u>lamella</u> element is constant over the surface of said <u>lamella</u> element, but varies between <u>lamellas</u> elements.
- 6. (Currently Amended) The method according to claim 4, wherein the first <u>lamella</u> element in a series of <u>lamellas</u> elements receives a smaller amount of glue than subsequent <u>lamellas</u> elements.
- 7. (Currently Amended) The method according to claim 4, wherein the amount of glue applied to each <u>lamella</u> element varies over the surface of said <u>lamella</u> element.
- 8. (Currently Amended) The method according to claim 4, wherein the amount of glue applied is controlled by controlling movement of the lamella(s) element(s) during glue application.

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9. (Currently Amended) The method according to claim 8, wherein the amount of glue applied is controlled by controlling the rate of application of glue onto the surface of each <u>lamella</u> element.

- 10. (Currently Amended) The method according to claim 8, wherein the speed of movement is varied from one <u>lamella</u> element to another.
- 11. (Currently Amended) The method according to claim 8, wherein the speed of movement is varied during the glue application on each element.
- 12. (Original) The method according to claim 11, wherein the speed of movement is varied stepwise or continuously.
- 13. (Original) The method according to claim 9, wherein the application rate is varied stepwise or continuously.
- 14. (Currently Amended) An apparatus for the manufacturing of <u>laminated beams</u> composite products, wherein a plurality of <u>lamellas</u> elements are assembled by gluing them together under pressure, comprising

an element a lamella feeder;

- a glue applicator;
- a <u>lamella</u> stacking unit;
- a control unit; and
- a press;

said control unit being programmable to run at least one of a control sequence for the glue applicator and the element lamella feeder to provide an optimal applied glue amount which varies as a function of a waiting lamella stacking time defined

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as the time between glue application and pressing for a given lamella

- 15. (Currently Amended) The apparatus as claimed in claim 14, wherein the control sequence is adapted to control the speed of movement of the feeder, and thereby of the <u>lamellas</u> elements through the glue applicator.
- 16. (Currently Amended) The apparatus as claimed in claim 14, wherein the control sequence is adapted to control the rate of glue application to the <u>lamellas</u> elements.
- 17. (Currently Amended) Apparatus for the controlled application of glue to <u>lamellas</u> elements to be assembled to a <u>laminated beam</u> composite structure, comprising
 - a lamella an element feeder;
 - a glue applicator; and
 - a control unit;

said control unit being programmable to run at least one of a control sequence for the glue applicator and the <u>lamella</u> element feeder to provide an optimal applied glue amount which varies as a function of a <u>waiting lamella stacking time defined</u> as the time between glue application and pressing for a given element <u>lamella</u>.